

REMARKS

Claim Status and Amendments

The specification was amended by replacing [[10.000]] with 10,000. This amendment does not add new matter, but rather adapts the style of writing numbers from a style common in Europe to the style more common in U.S. practice.

Claims 1-12 and 14-21 are pending in the application. Claims 15-19 are withdrawn from consideration. Claim 13 is canceled by the present amendment. Claims 1, 4, 5, 14, and 20 are presently amended.

Claim 1 was amended to specify a C₄-C₁₂ medium chain fatty acid. This amendment is supported by throughout the specification, for example, page 1, l. 8 and page 3, l. 32. Claim 1 was amended to specify that the concentration of triglyceride is about 0.25 to about 10 %. This amendment is supported on page 6, l. 15 of the specification.

Claim 1 was amended to specify that the lipolytic enzyme is an active lipolytic enzyme. This amendment is supported at page 8, ll. 13-15 of the specification, where it teaches that the instantly claimed feed composition supplements the natural lipase activity in the stomach and upper intestine by providing exogenous lipolytic enzyme(s). The exogenous lipolytic enzyme(s) would not supplement the natural lipase activity unless the exogenous lipolytic enzyme were active.

Claim 1 was amended to specify that the lipolytic enzyme concentration is about 100 to about 10,000 ppm. This amendment is supported on page 6, l. 16-17 of the specification. The concentrations of triglyceride and lipolytic enzyme are also supported by original claim 13.

Claim 4 was amended by deleting [or more] and deleting [and/].

Claim 5 was amended by deleting [, such as butterfat and coconut oil].

Claim 14 was amended by replacing [said] with --the--.

Claim 20 was amended by adding the word --animals--.

The present amendments do not add new matter. Applicants respectfully request that the amendments be made of record.

Rejections under 35 U.S.C. § 112

Claims 1-14 and claims 20-21 were rejected under 35 U.S.C. § 112 as being indefinite and/or vague. Applicants have amended claims 1, 4, 5, 14, and 20 as suggested by the Examiner, so Applicants respectfully request that these rejections be withdrawn.

Rejections under 35 U.S.C. § 102

The Hull reference

Claims 1-10 and 20-21 were rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by U.S. Patent No. 3,477,853, by Hull, et al. Specifically, the Examiner alleged that Hull discloses a composition suitable as a feed comprising medium chain fatty acids and one or more lipolytic enzymes. The Examiner pointed out that the intended use of a composition does not change the composition itself. The Examiner also pointed out that various methods of making a composition do not change the composition. The Examiner further alleged that the instant composition is claimed as a product-by-process and therefore a lesser burden of proof is required to make out a case of prima facie anticipation/obviousness than would be required with a conventional product claimed. Applicants respectfully traverse.

As a preliminary matter, Applicants note that the Examiner incorrectly characterized the claims as being product-by-process claims. With the possible exception of claim 8, the claims are not product-by-process claims; rather they are conventional product claims directed to a product comprising particular components in particular concentrations. The Examiner therefore does not have a lesser burden of proof to make out a prima facie case of anticipation/obviousness for these claims. The Examiner has the burden of demonstrating that a reference (or combination of references, in the case of obviousness) teaches every element of the rejected claims.

The Hull reference is directed to a method of producing sweet cream buttermilk from lipolyzed cream. Hull does not teach every element of amended claim 1. Specifically, Hull does not teach a feed composition comprising about 0.25 to about 10 %triglyceride and about 100 to about 10,000 ppm lipolytic enzyme.

Applicants note that original claim 13 was not rejected under 35 U.S.C. § 102 as being anticipated by Hull. As claim 1 now recites the limitations of original claim 13, the rejection of claim 1 under 35 U.S.C. § 102 should be withdrawn. Likewise, Applicants respectfully request that the rejection of the remaining claims, which incorporate claim 1, be withdrawn.

The Hass Reference

Claims 1-9 and 20-21 were rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by U.S. Patent No. 3,857,968, by Hass et al. Specifically, the Examiner alleged that Hass discloses a feed composition comprising butter oil, which comprises medium fatty acids and one or more lipolytic enzymes. Applicants respectfully traverse.

Hass does not disclose every element of presently amended claim 1. Specifically, Hass does not teach a feed composition comprising about 0.25 to about 10 % triglyceride and about 100 to about 10,000 ppm lipolytic enzyme. Applicants therefore respectfully request that the rejection of claim 1, and the remaining claims, which incorporate claim 1, be withdrawn.

Rejections under 35 U.S.C. § 103

Claims 1-11 and 20-21 were rejected under 35 U.S.C. 103(a) as allegedly being obvious in view of Hull taken with Haas. Specifically, the Examiner alleged Hull and Haas each disclose a composition suitable as a feed comprising medium chain fatty acids and one or more lipolytic enzymes. The Examiner pointed out that the use of a composition does not change the composition itself. The Examiner alleged that the instant claims are product-by-process claims and are therefore a lesser burden of proof is required to make out a case of prima facie anticipation/obviousness of these claims. The Examiner alleged that the difference between the references and the instant claims is that the reference does not teach a mixture of lipase and esterase. The Examiner further alleges that it would have been obvious to use the two enzymes together in combination with a medium chain fatty acid triglyceride substrate in a feed composition because the action of the two enzymes is different and a combination thereof would achieve better results more efficiently. The Examiner further alleges that one of skill in the art would have used a lipase and an esterase in combination to make a composition that is more digestible and more palatable. Applicants respectfully traverse.

As pointed out above, the instant claims, with the possible exception of claim 8, are not product-by-process claims and the Examiner does not have a lessened burden to make out a prima facie case of obviousness for these claims. The Examiner has the burden of showing that the combination of references teaches every element of the rejected claims to support a prima facie case of obviousness.

Neither Hull nor Haas teach or suggest every element of claim 1. Specifically, these references fail to teach or suggest a feed composition comprising about 0.25 to about 10 % triglyceride and about 100 to about 10,000 ppm lipolytic enzyme. The presently claimed composition unexpectedly provides a physiological environment in the stomach of early-weaned animals that regulates and stabilizes gastrointestinal flora. The instant composition has unexpectedly high bacteriostatic and bactericidal activity against Gram-positive and Gram negative bacteria. *See*, Experiment 4, Table 9. The specified concentration of lipolytic enzymes in the instant composition is beneficial to help overcome the pronounced deficiency of lipolytic enzymes in such animals shortly after weaning.

One would not be motivated by Hull, Haas, or a combination thereof to arrive at these concentrations because those references do not concern compositions for supplementing the physiological environment in the stomach of early-weaned animals. Hull is directed to a method of producing sweet cream buttermilk from liopolyzed cream. One would not be motivated to deviate from the concentrations disclosed in Hull, which are disclosed therein as being ideal for producing sweet cream. Haas is directed to a method of increasing the palatability of animal food. One would not be motivated to deviate from the concentrations of lipolytic proteins disclosed therein for increasing palatability. Neither of these references produce a composition that is intended to provide active lypolitic enzyme to an animal, as is apparent in the fact that both Hull and Haas treat their compositions to deactivate the lypolitic enzyme before providing their composition for consumption by an animal. *See*, Hull, col. 3, ll. 4-9, *and see*, Haas, col. 3, ll. 63-68.

The presently claimed composition provides unexpected results, i.e., a physiological environment in the stomach of early-weaned animals that regulates and stabilizes gastrointestinal flora. The instant composition also exhibits unexpectedly high bacteriostatic and bactericidal activity. Neither these benefits, nor the concentrations presently claimed, which unexpectedly provided the benefits, would have been apparent from Hull, Hass or a combination of the two. Applicants therefore respectfully request that the rejection under 35 U.S.C. 103 be withdrawn.

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The Examiner is invited to contact the undersigned attorney at (713) 787-1438 with any questions, comments or suggestions relating to the referenced patent application.

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Respectfully submitted,

A handwritten signature in black ink, appearing to read 'RR', with a horizontal line extending to the right.

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